



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

November 21, 2001

CERTIFIED MAIL 7000 0520 0021 8610 8349 RETURN RECEIPT REQUESTED

Mr. Jim Ellis
Plant Manager
DuPont Beaumont Works
P. O. Box 3269
Beaumont, TX 77704

Re: Final Injection Well No Migration Exemption Reissuance Decision

Dear Mr. Ellis:

Effective the date of this letter, the Environmental Protection Agency (EPA) approves the reissuance request for E. I. du Pont de Nemours & Co., Inc., (DuPont) exemption to the land disposal restrictions for the three injection wells at the facility in Beaumont, Texas.

The land disposal restrictions prohibit the injection of hazardous waste unless a petitioner can demonstrate to the EPA, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the injection zone for as long as the wastes remain hazardous. The land disposal restrictions for injection wells codified in 40 CFR Part 148, provide the standards and procedures by which petitions to dispose of an otherwise prohibited waste by injection will be reviewed, and by which exemptions pursuant to these petitions will be granted or denied.

A letter dated November 21, 2000, informed DuPont that the EPA was proposing to approve DuPont's petition reissuance request for an exemption to the land disposal restrictions. As required by 40 CFR §§148.22(b) and 124.10, a public notice was issued November 27, 2000, and a comment period extension notice was issued December 28, 2000, notifying the public of the opportunity to comment on this action. The initial public comment period opened on November 27, 2000, and closed on January 31, 2001. There was a public hearing held January 4, 2001. The second comment period opened on July 19, 2001, and closed on September 4, 2001. A responsiveness summary was prepared to address all of the extensive comments received.

Based on a detailed technical review of the submitted petition and support documents, the EPA has determined that this information for the DuPont facility meets the requirements of 40 CFR Part 148 by demonstrating no migration of hazardous constituents from the injection zone for 10,000 years.

The following are conditions of this exemption to the land disposal restrictions:

Petition Reissuance Approval Conditions

This petition reissuance approval to continue to allow injection of restricted hazardous waste is subject to the following conditions, which are necessary to assure that the standard in 40 CFR §148.20(a) is met. Noncompliance with any of these conditions is grounds for termination of the exemption in accordance with 40 CFR §148.24(a)(1).

This exemption reissuance is for existing wells WDW-100, WDW-101, and WDW-188. The proposed well, Well 7, has also been incorporated into the modeling demonstration for the Frio Sand. The no migration demonstration shows that there will not be migration of injected wastes out of the injection zones for 10,000 years.

1. Injection of restricted waste shall be restricted to the following injection intervals and injection zones for the following injection wells:

<u>Injection Well</u>	<u>Injection Zone</u>	<u>Injection Interval</u>
WDW-100	3786' - 7669'	Lower Oakville: 4206' - 4316'
		Frio: 7325' - 7529'
WDW-101	3786' - 7669'	Lower Oakville: 4199' - 4298'
		Frio: 7325' - 7529'
WDW-188	3689' - 7669'	Lower Oakville: 4089' - 4173'
		Frio: 7325' - 7529'

Note: All depths are approximate below mean sea level depths.
The "*" denotes depths referenced to WDW-188 log depths.
Depths without a "*" are referenced to the log for that well.

2. The volume injected into the Frio injection interval during any given month shall not exceed the volume calculated by multiplying (the injection rate, 700 gpm)x(60 minutes per hour)x(24 hours per day)x(the number of days in that month). The volume injected into the Lower Oakville injection interval during any given month shall not exceed the volume calculated by multiplying (the injection rate, 650 gpm)x(60 minutes per hour)x(24 hours per day)x(the number of days in the month).
3. The facility shall cease injection into the Lower Oakville injection interval on December 31, 2010, and into the Frio injection interval on December 31, 2020.

4. The characteristics of the injected waste stream shall at all times conform to those of Section 6.1 in the petition reissuance entitled "Wastewater Characterization." The running three-month volume weighted average density of the waste stream injected into the Frio injection interval shall remain within a range of 1.000 to 1.075 gm/cc measured at 70 °F and atmospheric pressure. The running three-month volume weighted average density of the waste stream injected into the Lower Oakville injection interval shall remain within a range of 1.055 to 1.085 gm/cc measured at 60 °F and atmospheric pressure. The running three-month average of each interval shall be calculated by multiplying each day's density value by that day's injected volume, totaling those values for the previous three-whole calendar month period, and dividing by that three-month injected volume. For the purpose of the above calculation, each day's density value shall be obtained by at least one representative grab sample.
5. The approval for injection is limited to the following hazardous wastes in the injection intervals specified below:

Injection Intervals

Waste Codes

Frio

D003, D004, D005, D007, D008, D009, D018, D036,
D038
K011, K013, K014, K083, K103, K104
U012, U169

Lower Oakville

D003, D004, D005, D007, D008, D009, D018, D038
K011, K013, K014

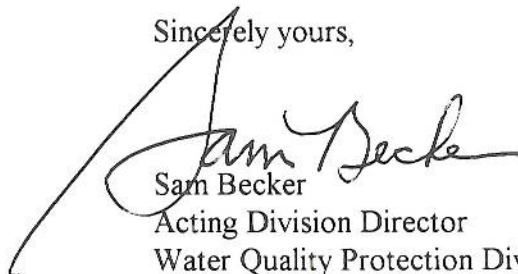
6. The facility must petition for approval to inject additional hazardous wastes which are not included in Condition No. 5, above. The facility must also petition for approval to increase the concentration of any waste which would necessitate the recalculation of the limiting concentration reduction factor and the extent of the waste plume. Petition reissuance and modifications shall be made pursuant to 40 CFR §148.20(e) or (f).
7. DuPont shall annually submit to EPA the results of a bottomhole pressure survey for both the Lower Oakville and the Frio Sands. All other active injection wells in the Lower Oakville and Frio Sands must demonstrate communication with the well in which the bottomhole pressure survey was conducted for its interval. These surveys shall have been performed after shutting in each well for a period of time sufficient to allow the pressure in the injection interval to reach equilibrium, in accordance with 40 CFR §146.68(e)(1). This annual report should include a comparison of reservoir parameters and pressures determined from the falloff tests with parameters used in the approved no migration petition reissuance for verification of compliance.

8. The facility shall maintain a monthly calculated 25°C equilibrium pH of 8.0 or greater for the waste stream injected into the Lower Oakville injection interval. This calculation will be based on 12-hour volume measurements and the pH measured at room temperature (approximately 25°C) of 12-hour representative grab samples for these volumes.
9. DuPont shall annually submit to EPA the results of an injectate compositional analysis for the Lower Oakville injection interval. This analysis shall include a demonstration that the basis for the monthly calculated equilibrium pH remains valid.
10. Upon the expiration, cancellation, reissuance, or modification of the Texas Natural Resource Conservation Commission Underground Injection Control permit for Well Nos. WDW-100, WDW-101, or WDW-188, this exemption is subject to review. A new demonstration may be required if the information shows that the basis of granting the exemption is no longer valid.

In addition to the above conditions, this petition reissuance is contingent on the validity of the information submitted in the DuPont petition reissuance request for an exemption to the land disposal restrictions. This reissuance decision is subject to termination when any of the conditions occur which are listed in 40 CFR §148.24, including noncompliance, misrepresentation of relevant facts, or a determination that new information shows that the basis for approval is no longer valid.

If you have any questions or comments, please call Philip Dellinger at (214) 665-7165.

Sincerely yours,


Sam Becker
Acting Division Director
Water Quality Protection Division

cc: Bruce Kobelski, USEPA OGWDW
Ben Knape, TNRCC